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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,106	05/06/2004	Man-Bok Cheon	21C-0100	7289
23413	7590	07/13/2007	EXAMINER	
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			ART UNIT	PAPER NUMBER
			2629	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/840,106</p>	<p>Applicant(s)</p> <p align="center">CHEON ET AL.</p>	
	<p>Examiner</p> <p align="center">Leonid Shapiro</p>	<p>Art Unit</p> <p align="center">2629</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 14 is/are rejected.
- 7) ☒ Claim(s) 8-13 and 15-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8-23-06</u> | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-7,14 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. (6,833,886).

As to claim 1, Suzuki et al. teaches a display device for displaying images (col. 1, lines 10-15), comprising:

an image signal source unit to provide primary image data (fig. 1, item Fi, col. 4, lines 10-13) and selected compensation data to compensate the primary image data (fig. 1, items 22,24, col. 4, lines 27-33); and

a display unit to display images using compensated image data obtained by compensating the primary image data with the selected compensation data (fig.1, items F0,10,14,16, col. 4, lines 16-33),

wherein the selected compensation data is selected from a set of compensation data in response to variation of ambient temperature of the display device (fig.1, items F0,12,24, col. 14, lines 1-24).

As to claim 2, Suzuki et al. teaches a temperature sensor to detect the variation of the ambient temperature of the display device and provide temperature

data corresponding to the variation of the ambient temperature (fig. 1, item 24,col. 4, lines 27-31).

As to claims 3-4, Suzuki et al. teaches a data processing part to provide the primary image data to the display unit (fig.1, items Fi,10,12);

a first memory to store the set of compensation data, each compensation data being associated with corresponding one of different temperature ranges (fig.1, items 22,12, col. 14, lines 1-15); and

a first controller to read the selected compensation data from the first memory in response to the temperature data from the temperature sensor and provide the selected compensation data to the display unit (fig.1, items 22,12, col. 14, lines 1-24).

As to claims 5-6, Suzuki et al. teaches a second controller to receive the primary image data from the data processing part and the selected compensation data from the first controller and generate the compensated image data (fig. 1, items Fi,12,22,24,Fo, col. 4, lines 4-21);

a data driver to receive the compensated image data and generate compensated driving voltage signals (fig. 1, item 16); and

a display panel to receive the compensated driving voltage signals to display the images (fig. 1, item 10).

As to claim 7, Suzuki et al. teaches the second memory stores the selected compensation data such that a plurality of look-up tables of compensation data are each stored at corresponding address in the second memory (fig. 1, item 22, col. 14, lines 1-15) and checksum data is assigned to each of the look-up tables.

Notice, that checksum is inherently is used for memory and look-up tables.

As to claim 14, Suzuki et al. teaches a method of compensating primary image data to increase a response speed of a display system (col. 1, lines 10-15), comprising:

storing a plurality of look-up tables of compensation data in a memory, each of the look-up tables being associated with corresponding one of different temperature ranges (fig.1, items F0,12,24, col. 14, lines 1-24);

detecting variation of ambient temperature of the display system (fig.1, items 12,24, col. 4, lines 27-33);

selecting a look-up table of compensation data in response to the detected variation of the ambient temperature (fig.1, items 12,24, col. 14, lines 1-15); and

compensating the primary image data using the selected look-up table of compensation data (fig.1, items 12,24, col. 14, lines 16-24).

Allowable Subject Matter

2. Claims 8-13,15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Relative to claim 8 the major difference between the teaching of the prior art of record (Suzuki et al.) and the instant invention is a serial-parallel converting part to convert the selected compensation data into parallel compensation data; a third memory to store compensation data associated with characteristics of the display

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unit; a first switching part to transfer one of the parallel compensation data from the serial-parallel converting part and the compensation data from the third memory in response to a first clock signal; and a fourth memory to store output of the first switching part in response to a second clock signal.

Claims 9-10 depend on claim 8.

Relative to claim 11 the major difference between the teaching of the prior art of record (Suzuki et al.) and the instant invention is a serial-parallel converting part to convert the selected compensation data into parallel compensation data; a buffer to store the parallel compensation data and generate the parallel compensation data in response to a buffer control clock; a first switching part to transfer one of the parallel compensation data from the serial-parallel converting part and the compensation data from the third memory in response to a first clock signal; and a fourth memory to store output of the first switching part in response to a second clock signal.

Claims 12-13 depend on claim 11.

Relative to claim 15 the major difference between the teaching of the prior art of record (Suzuki et al.) and the instant invention storing the selected look-up table of compensation data in a buffer at a current frame; and compensating the primary image data using the selected look-up table of compensation data at a next frame, the selected look-up table of compensation data being transferred from the buffer to a memory to be access.

Claims 16-17 depend on claim 15.


Telephone Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS
04.18.07


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